



Cleveland Harbor, OH

Harbor Features

- Located on Lake Erie in the city of Cleveland, Cuyahoga County, Ohio
- Authorization: River & Harbor Acts of 1875, 1886, 1888, 1896, 1899, 1902, 1907, 1910, 1916, 1917, 1935, 1937, 1945, 1946, 1958, 1960, 1962, Water Resources Development Acts of 1976 and 1986, Supplemental Appropriations Act of 1987 and the Energy & Water Appropriations Act of 1988
- Deep draft commercial harbor
- Authorized depths are 25-29 feet in the outer harbor and 18-27 feet in the river
- 49th leading U.S. port with 10,791,326 tons of material shipped or received in 2010
- Cleveland Harbor is ranked 6th among the Great Lakes Ports
- Over 5.5 miles of breakwater structures
- 5.8 miles of Federal channel on the Cuyahoga River and 1 mile of Federal channel on the Old River
- Confined disposal facilities (CDFs) are located to the east of the harbor entrance
- Major stakeholders include Cleveland-Cuyahoga County Port Authority, Burke Lakefront Airport, ArcelorMittal, U.S. Coast Guard, Lake Carriers' Association, and Cargill

Project Requirements

- A minimum of 225,000 cubic yards (CY) of material must be dredged each year. Dredging was last completed in FY12 and is scheduled for FY13
- The sediment backlog within the Cuyahoga River channel was approximately 600,000 CY in 2012
- Severely deteriorated sections of the east and west breakwaters, arrowheads and finger pier must be repaired



- The existing CDF's will reach capacity by current hydraulic placement methods in 2014. An interim DMMP is being prepared to address the short-term (through 2018) capacity needs until a new long-term plan is in place
- Results of sediment sampling conducted in 2012 will be evaluated to determine the suitability of placing sediment in the open lake instead of a CDF
- Critical requirements include maintenance dredging, dredged sediment management and structure repair

Consequences of Not Maintaining the Project

- Failure to dredge the harbor will result in continued shoaling and reduced channel dimensions; resulting in light loading, increased transportation costs and unsafe navigation conditions

Consequences of Not Maintaining the Project

- Failure to implement critical interim and long term CDF capacity measures could lead to a reduction in annual dredging quantities and the inability to dredge once existing CDF capacity is exhausted.
- Light loading; losses of between 1 and 2 feet of channel depth would result in increased transportation costs of between \$2.3M and \$5.2M annually.
- Reduction of bulk commodities that pass through the harbor and generate \$305M annually in direct revenue while supporting over 2,000 jobs and generating over \$112M per year in personal income.
- If the harbor was closed to commercial traffic, commodities would have to be transported by rail and truck. This would increase annual emission rates by over 129,000 tons of harmful particulate matter (PM-10) and increase costs by \$4,023,000 due to increased railroad related accidents, and \$4,901,000 due to increased trucking related accidents.

- Failure to repair the deteriorated structures will result in the continued degradation, increased future maintenance costs and unsafe navigation conditions within the harbor leading to vessel delays and potential damage to shoreline structures. Additionally, the finger pier is utilized by USACE Floating Plant for seasonal mooring and continued degradation could jeopardize this use.

Transportation Importance

- Major receiving and shipping port on the Great Lakes
- Critical Harbor of Refuge
- Commodities shipped or received include iron ore, limestone, sand and gravel, salt, cement and concrete, general cargo and liquid bulk
- Major iron ore transshipment facility located at Cleveland's Outer Harbor. This facility provides iron ore to inland steel mills at lower delivery costs when compared to truck or direct rail delivery

**U.S. Army Corps of Engineers Fiscal Year (FY) 2011, 2012 and 2013
Cleveland Harbor, Ohio - Project Requirements and President's Budget (\$1,000)**

Work Package	GLRI Funds	FY11 Requirement	FY11 Work Plan	FY12 Requirement	FY12 Appropriation	FY13 Requirement	FY13 President's Budget
Maintenance Dredging – Primary		2,600	3,120	2,850	2,587	2,585	2,585
DMMP/CDF Beneficial Use Activities	50	400		200	190	259	259
Dredged Material Management Operations CDF 10B Excavation							
E&D, New CDF/Additional Interim Measures		800	800	600	570		
E&D Long Term Management Plan						494	494
Fill Management Activities, Interim CDF (Dike 12, Phase 2)		7,000	4,136				
Fill Management Activities, Phase 1				4,000	3,694		
Fill Management Activities, Phase 2				4,000		3,760	3,760
E&D Interim CDF (Dike 9, Phase 2)		350	320				
Interim CDF Maintenance (Grading)		250	250	350	258	300	300
Snagging & Clearing Floating Plant (F/P)		40	40	60	57	65	
Structure Repair. – E & W Arrowhead Breakwaters (F/P)		900	900	970	970	1,055	806
Structure Repair. – E & W Arrowhead Breakwaters (Stone)		450		450		450	
Structure Repair – Dike 10B (F/P)						330	
Construction, West Pierhead Repair		3,400			288	60	
Construction, East Breakwater Repair (Sta 84- 94)		2,500	246	2,900	24		
Const., East Breakwater Repair (Sta 98-100, 89-91)						2,375	
Construction, Finger Pier Repair, Phase 1		6,000				3,100	
Construction, Finger Pier Repair, Phase 2		6,000				3,100	
Construction, Wharf and Utility Repair (1&3)		4,500		300		3,900	
Construction, Wharf and Utility Repair (2)		4,500		300		3,200	
E&D, East Breakwater West End Section Repair		100		150		250	
Construction, East Breakwater West End Section Repair		2,500					
E&D, Finger Pier Repair						225	
E&D East Breakwater Repair (Sta. 94-110)		250					
E&D East Breakwater Repair (Sta. 84-89, 100-106)						75	
E&D West Pier Repair		300					
E&D West Breakwater East End Section Repair		250					
E&D East Arrowhead Breakwater		300					
E&D West Breakwater Repair		300					
Project Condition Surveys		490	490	515	505	505	505
CDF ERGO Compliance		70					
Environmental Compliance (CDF Monitoring, Field)		15					
Regional Economic Data Collection		250	250	250	237	250	250
Sediment Sampling and Analysis						500	
TOTALS	50	34,015	10,552	17,595	9,380	26,838	8,959

Congressional Interests

- Representative Dennis J. Kucinich D-OH-10
- Representative Marcia Fudge D-OH-11
- Senator Rob Portman R-OH
- Senator Sherrod Brown D-OH